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Online ordering system, in particular for food outlets,
and method of operating an online ordering system of
this type

- 5 The invention relates to an online ordering system, in particular for food outlets, and to a method of operating a system of this type.

- 10 The invention is based on the object of providing an ordering system for food outlets and restaurants which can respond flexibly and location-independently to the needs of the respective user of the system. The invention solves this technical problem by the online ordering system comprising the features of claim 1 and
15 by the method of operating an online ordering system with the features of claim 7.

- The online ordering system for food outlets according to the invention, with it being possible for the food
20 outlets to lie within any desired geographical area, has a computer system which is accessible via the Internet under a domain and in which data on the food outlets are stored. These data concern in particular the geographical location, determined for example by
25 the assigned postal code of the respective food outlet, information specifying the geographical district in which a specific food outlet delivers items of food ordered, the respective menu of the various food outlets, including prices, and also for example time
30 periods during which the food outlet takes or processes orders.

- On the computer system mentioned, and hereafter also referred to as the domain server, there runs a program,
35 in particular an interactive program, which communicates for example with a user who has dialled up the corresponding domain.

The user is in this case connected by a computer system of its own, or at least by an (intelligent) terminal, to the domain server via the Internet.

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According to the invention, the online ordering system also in each case comprises a communication connection between the domain computer system and all the food outlets covered by the system, which in each case connects an output device and/or display device in the food outlets to the computer system. A fax or telephone connection, but also a communication connection via which e-mails can be sent, come into consideration in particular for this.

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With the system described above, a large number of target groups can be reached, for example private individuals, schoolchildren, students, freelance workers, craftsmen, employees of relatively small companies and also people at medium-sized companies which do not run a canteen of their own. This is also advantageous in particular since nowadays the target people mentioned often have an Internet connection.

25 The users can consequently use the system according to the invention to order items of food and/or drinks of any kind without regional or district-related restrictions under one or more prescribed addresses, for example a WWW domain, and, depending on the embodiment of the invention or according to the choice of the user, make a corresponding table reservation at the restaurant and/or have the ordered items of food/drinks delivered to a specified address for a prescribed time.

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35 Irrespective of the location of the respective user, said user must always specify one or more prescribed addresses, the domain address(es) of the computer system, which covers for example food outlets

throughout the entire Federal Republic of Germany. The ordering system according to the invention adapts itself on the basis of user inputs completely to the needs of the respective user.

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Once this domain has been dialled up, the user is displayed a start page by the online ordering system according to the invention. Depending on the chosen address of the computer system, this start page can be designed appropriately for the target group or specifically for the target group.

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This start page, like the other menu or display pages of the system, may have not only interactive fields but also advertising areas, which may be time-dependent. An interactive field may in this case comprise for example an icon, which can be selected by the user, whereupon the system responds input-dependently, or else an alphanumeric input pad, which the user uses for input. Once the start page is displayed, the user can start the ordering procedure, for example by pressing a button on the mouse on his computer system.

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Depending on the embodiment of the system, one or more types of ordering may be provided, for example a prompted type of ordering or an unprompted type of ordering. In the user-prompted type of ordering, before the respective inquiry, the user receives information from the ordering system giving him suggestions for the inputs to be carried out.

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In the unprompted type of ordering, the user can specify directly a first restriction of the food outlets coming into consideration by entering geographical information, for example the postal code or the location. The online ordering system for food outlets in any desired geographical area responds to this user input on the basis of the stored data on the food outlets and displays the food outlets coming into

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- consideration to the user in a new field or on a new page, depending on the embodiment. In this respect, the system according to the invention is set up in such a way that the data stored in the system on the food outlets are filtered with the criterion entered by the user, here the geographical information specified, and the food outlets which satisfy the criterion entered are determined in this way.
- 10 During this determination, the system also takes into account whether the food outlets prepare or deliver food at all at the chosen or current time. The user selects one of the displayed food outlets by a renewed user input. The system responds to this user input, again on the basis of the stored data on the food outlets, and displays the food offered by the food outlets selected. This is followed by a further user input, in such a way that at least one of the items of food and/or drinks displayed is selected. In a following step, the system according to the invention transmits the order to the food outlet selected. The order may be transmitted platform-independently here, for example by means of fax or e-mail, in particular also script-controlled.
- 25 In one embodiment of the invention, the ordering system also transmits data to the selected food outlet to identify a delivery address to which the food ordered is to be delivered.
- 30 In a further embodiment of the invention, the ordering system also displays various categories of food from which the user can select a category by a corresponding input, whereupon the system displays on the basis of the stored data on the food outlets the food outlets coming into consideration that offer the selected category of food.
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In an additional embodiment of the invention, the online ordering system displays to the user price categories, from which said user can select a category by a user input, whereupon the system displays on the basis of the stored data on the food outlets the food outlets which fall into the price category selected.

An order placed by means of a class of ordering system according to the invention given by way of example may proceed as follows:

- Selection by the user of the start page by means of the domain name (for example `http:\\www.domain-name.de`).
 - Selection by the user of the "ordering" item.
 - Input by the user of the postal code.
 - Selection by the user of the category of food, which is generated on the basis of the entered postal code and the current time of day.
 - Display by the ordering system of all food outlets coming into consideration that satisfy the previously input criteria, the following being examples of the criteria:
 - delivery to the selected postal code district
 - category of food
 - food outlets still delivering at the current time of day
 - minimum amount of order in DM/EURO
 - Selection by the user of the food outlet
 - Display by the system of the individual food menu and information on the food outlets
 - Selection by the user of the items of food and drinks to be ordered
 - In the case of joint orders, a name can be assigned to each item of food or each drink by user input.
- These names serve for an overview of the order and can be printed out by the user on request (later) by transmission of the data from the online ordering system to the user.

- Display by the ordering system of the entire order before confirmation by the user.
- The system provides the user with possibilities allowing the user to alter the order
- 5 - Sending of the order by the user to the system, by e-mail, script-controlled platform-independently or directly by interaction of the user
- Passing on of the order to the respective food outlet by the online ordering system.

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In one embodiment of the invention, the passing on of the order comprises an e-mail by the online ordering system to the respective food outlet.

- 15 In another embodiment, the system or a connected system or a connected fax server generates from the e-mail of the user's order a fax which is transmitted directly by the system to the respective food outlet.

- 20 It may also be provided that the user is sent corresponding information on the success/failure of the transmission of the order to the respective food outlet by the ordering system according to the invention, for example by e-mail, fax or an electronic voice by
- 25 telephone.

- If there are problems in the transmission of the order to the food outlet, in a special embodiment the online ordering system makes further attempts to fax the food
- 30 outlet. After that, the system will, for example, send a message by electronic voice by telephone, e-mail or over another fax machine to the food outlet, with the suggestion to check the fax machine sent to first. After the unsuccessful attempt at transmission, the
- 35 orderer is notified of this by the online ordering system, as specified above, for example by e-mail, fax and/or an electronic voice by telephone.

In one embodiment, the online ordering system is set up in such a way that, after the input of personal data, such as for example the orderer's address, delivery address, telephone or fax number, the user is allocated
5 an identification number and a PIN number by the online ordering system according to the invention. This speeds up the ordering procedure during subsequent uses of the online ordering system by the specific user, since only two data inputs have to be entered by the
10 user to the system according to the invention for the unequivocal identification of the user. Should the delivery address change, for example, this can be altered temporarily/permanently each time an order is placed.

15 In an advantageous embodiment, before confirmation of the order, the user is shown a disclaimer of liability, in which it is pointed out that the operators are acting as intermediaries and cannot be made liable for
20 losses or delays in delivery.

In a particularly advantageous embodiment of the online ordering system, the latter is set up in such a way that the payment for the items of food and/or drinks
25 ordered can take place by the user directly by interaction with the system, for example by electronic cash or by means of a credit card. The user is in this case asked by the system according to the invention to enter the corresponding data in fields provided, which
30 are assigned to the user profile in order to prevent multiple inputs as far as possible.

Figure 1 shows an embodiment of the online ordering system according to the invention given by way of
35 example. In this case, the system comprises a server 1, which can be dialled up on the WWW (Worldwide Web) of the Internet via a fixed domain address 3 or via various target-group-specific domain addresses from a multiplicity of user terminals or user computer systems

2, 2', 2''. The data mentioned above on the food outlets are stored on this domain computer system. Furthermore, an interactive program which has access to the data stored in a database via a software interface runs on the server. Users of the terminals or user computer systems 2, 2', 2'' can exchange information with the online ordering system. The online ordering system in this case operates as described above in response to the user inputs.

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An alternative embodiment of the invention comprises a database which is independent of the domain computer system and is connected to the domain computer, for example via a network.

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Figure 2 shows a start page 6, given by way of example, as generated by the user system and presented to the user. In the present case, the user has dialled up the WWW domain address "kohldampf.de". The start page has two advertising areas 7, 7', the design and content of which vary over time and may depend in particular on the geographical location of the user and/or the time of access, such as the time of day and/or day of the week, since, in certain embodiments of the invention, the system according to the invention designs the advertising areas user-dependently and/or time-dependently.

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Furthermore, the system provides, for example, interactive fields for criticism or a help function.

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The number 8 denotes the ordering field, in which the actual, menu-controlled ordering takes place, either prompted or unprompted. With the input of a postal code, the user can make the online ordering system carry out a first filtering of the food outlets.

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The system activities are continuously logged. The data occurring are evaluated internally under data

protection guidelines. They serve for controlling the advertising directed at the respective target groups on the system.

5 In the embodiment represented in figure 1, the ordering system is also connected via a telecommunication connection 4, which can be established at least temporarily, to fax machines 5, 5', 5'' etc. at the food outlets, via which the orders can be transmitted
10 by the system to the food outlets. However, the connection 4 also represents part of the Internet in the case in which the orders are transmitted by the ordering system to the respective food outlet by e-mails.

15 In an advantageous development, after sending the order, a fax is generated from the e-mail and is faxed to the food outlet. If transmission is successful, the orderer is informed of the status. Should problems
20 arise during the transmission, two further attempts are made to fax the food outlets. After that, they are called up by an electronic voice and notified that their fax machine is not working properly. After the third unsuccessful attempt, the orderer is notified
25 that two further attempts are being made to transmit the order. Should the fax machine of the food outlet still not successfully receive the order twice after the telephone call, the orderer is informed of the failure and requested to contact the food outlet
30 directly.

In a special embodiment of the invention, after receiving the order, the user can transmit an assessment of the items of food and/or drinks received
35 to the computer system, which is stored there and, if appropriate, made available to other users in a database by being called up.

In an embodiment of the invention not represented, a further computer system, for example a fax server which is connected to the domain computer via an e-mail or Internet connection, undertakes the generation of the
5 fax orders to the respective food outlets.